

October 2008 Summary

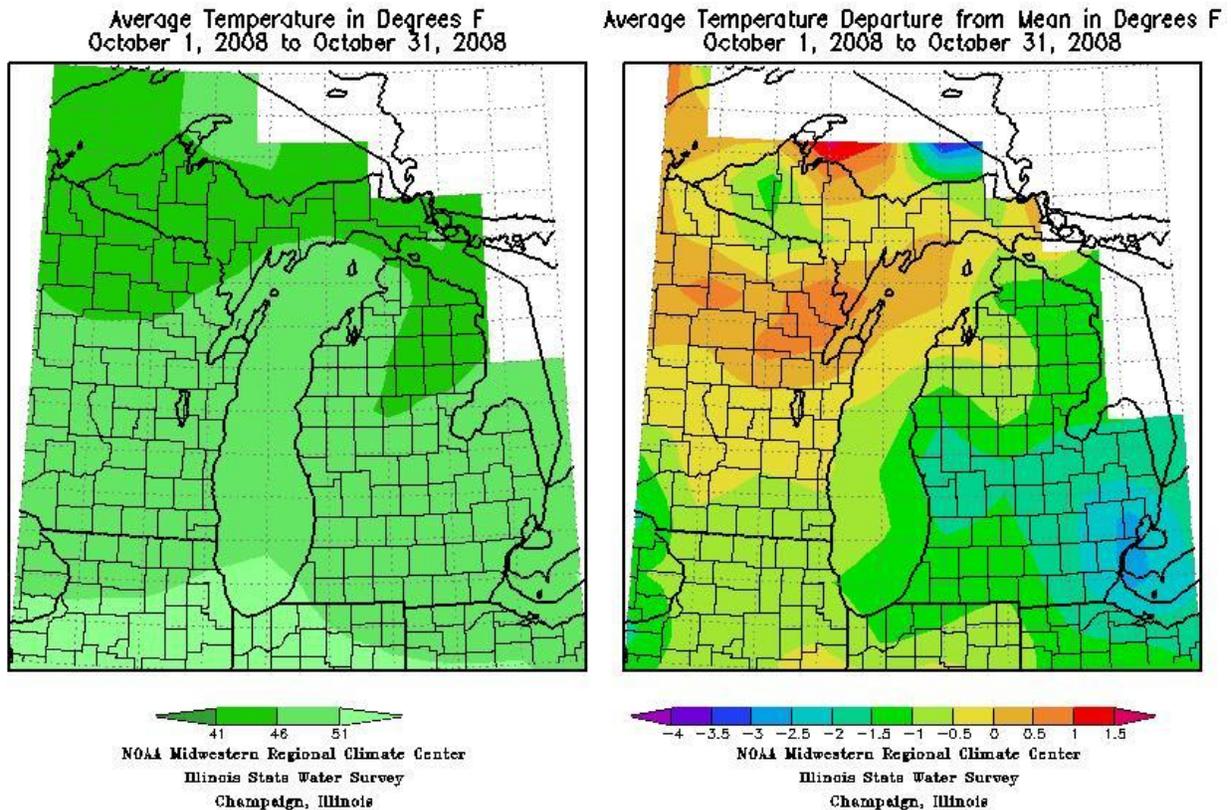
By Jānis (John) Laurens

October 2008 will be remembered for lacking severe weather events and also lacking any heavy precipitation events, in stark contrast to September 2008. In fact, there wasn't a single calendar day in Grand Rapids, Lansing or Muskegon for which an inch or more of precipitation was reported.

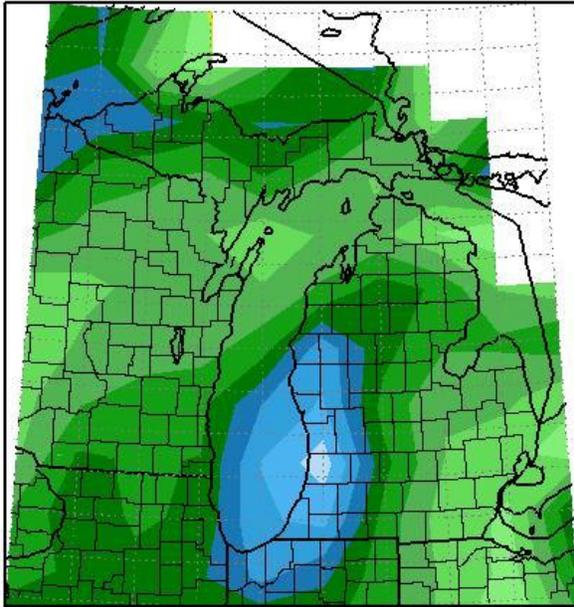
Temperatures averaged above five to ten degrees below normal during the first week of October, prior to a significant warmup during the second week. In fact temperatures averaged approximately ten to twenty degrees above normal from the 11th through the 13th. Temperatures returned to fairly close to normal for the majority of the second half of the month, although a brief cold snap occurred on the 27th and 28th.

A convective event on the 26th resulted in numerous reports of a quarter to half inch diameter hail, and isolated reports of hail to near three quarters of an inch in diameter. It was also windy on the 26th, and numerous coastal observation sites near Lake Michigan had wind gusts to around 50 mph. Peak wind gusts of around 40 to 50 mph were also reported on the 14th.

The graphics below (courtesy Midwest Regional Climate Center) show statewide temperature and precipitation trends for October 2008.

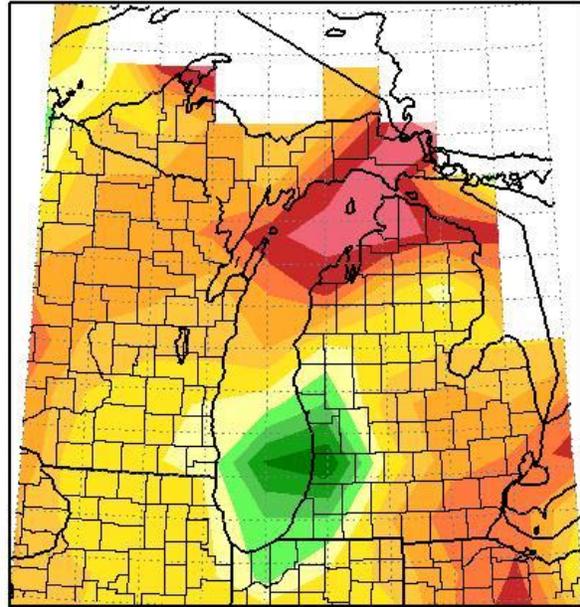


Total Precipitation in Inches
October 1, 2008 to October 31, 2008



0.01 0.12 0.6 1.2 1.5 1.8 2.1 2.4 2.7 3 3.3 3.6
NOAA Midwestern Regional Climate Center
Illinois State Water Survey
Champaign, Illinois

Total Precipitation Departure from Mean in Inches
October 1, 2008 to October 31, 2008



-1.8 -1.4 -1.2 -1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6
NOAA Midwestern Regional Climate Center
Illinois State Water Survey
Champaign, Illinois

THE GRAND RAPIDS MI CLIMATE SUMMARY FOR THE MONTH OF OCTOBER 2008

CLIMATE NORMAL PERIOD 1971 TO 2000

CLIMATE RECORD PERIOD 1892 TO 2008

WEATHER	OBSERVED		NORMAL	DEPART	LAST YEAR`S	
	VALUE	DATE (S)	VALUE	FROM	VALUE	DATE (S)
				NORMAL		

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TEMPERATURE (F)

RECORD

HIGH	89	10/01/1897				
LOW	18	10/30/1988				
		10/21/1974				
HIGHEST	82	10/12	MM	MM	88	10/08
LOWEST	27	10/30	MM	MM	31	10/28
AVG. MAXIMUM	59.7		59.6	0.1	67.3	
AVG. MINIMUM	40.0		40.2	-0.2	48.9	
MEAN	49.9		49.9	0.0	58.1	
DAYS MAX >= 90	0		MM	MM	0	
DAYS MAX <= 32	0		MM	MM	0	
DAYS MIN <= 32	5		MM	MM	1	
DAYS MIN <= 0	0		MM	MM	0	

PRECIPITATION (INCHES)

TOTALS	2.71		2.80	-0.09	3.13	
DAILY AVG.	0.09		0.09	0.00	0.10	
DAYS >= .01	12		MM	MM	13	
DAYS >= .10	8		MM	MM	10	
DAYS >= .50	2		MM	MM	1	
DAYS >= 1.00	0		MM	MM	0	

GREATEST

24 HR. TOTAL 0.89 10/24 TO 10/25

SNOWFALL (INCHES)

TOTALS	T		0.6	-0.6	0.0	
SINCE 7/1	T					
SNOWDEPTH AVG.	0		MM	MM	0	
DAYS >= 1.0	0		0.2	-0.2	0	

GREATEST

SNOW DEPTH 0 MM 0 MM
24 HR TOTAL T 10/26 TO 10/26

DEGREE_DAYS

HEATING TOTAL	468		471	-3	263	
SINCE 7/1	534		664	-130	359	
COOLING TOTAL	5		5	0	56	
SINCE 1/1	635		613	22	971	

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WIND (MPH)

AVERAGE WIND SPEED		8.0			
HIGHEST WIND SPEED/DIRECTION		33/250	DATE	10/26	
HIGHEST GUST SPEED/DIRECTION		41/260	DATE	10/26	

SKY COVER
POSSIBLE SUNSHINE (PERCENT) 47

NUMBER OF DAYS FAIR 9
NUMBER OF DAYS PC 16
NUMBER OF DAYS CLOUDY 6

AVERAGE RH (PERCENT) 68

WEATHER CONDITIONS. NUMBER OF DAYS WITH			
THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	3	RAIN	8
LIGHT RAIN	13	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	17	FOG W/VIS <= 1/4 MILE	0
HAZE	8		

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

Remarks: Trace of snow on the 26th was actually hail.

THE LANSING MI CLIMATE SUMMARY FOR THE MONTH OF OCTOBER 2008

CLIMATE NORMAL PERIOD 1971 TO 2000

CLIMATE RECORD PERIOD 1864 TO 2008

WEATHER	OBSERVED	NORMAL	DEPART	LAST YEAR`S
	VALUE	VALUE	FROM	VALUE
	DATE (S)		NORMAL	DATE (S)

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TEMPERATURE (F)

RECORD

HIGH	90	10/03/1898				
LOW	10	10/21/1895				
		10/22/1868				
HIGHEST	80	10/12	MM	MM	86	10/08
						10/07
LOWEST	25	10/30	MM	MM	31	10/28
AVG. MAXIMUM	58.5		59.8	-1.3	65.4	
AVG. MINIMUM	38.2		38.6	-0.4	47.5	
MEAN	48.4		49.2	-0.8	56.4	
DAYS MAX >= 90	0		MM	MM	0	
DAYS MAX <= 32	0		MM	MM	0	
DAYS MIN <= 32	7		MM	MM	3	
DAYS MIN <= 0	0		MM	MM	0	

PRECIPITATION (INCHES)

TOTALS	2.12		2.29	-0.17	3.36	
DAILY AVG.	0.07		0.07	0.00	0.11	
DAYS >= .01	12		MM	MM	15	
DAYS >= .10	6		MM	MM	8	
DAYS >= .50	1		MM	MM	3	
DAYS >= 1.00	0		MM	MM	0	

GREATEST

24 HR. TOTAL	0.53	10/08 TO 10/08				
		10/07 TO 10/08				

SNOWFALL (INCHES)

TOTALS	T		0.4	-0.4	0.0	
SINCE 7/1	T					
SNOWDEPTH AVG.	0		MM	MM	0	
DAYS >= 1.0	0		0.2	-0.2	0	

GREATEST

SNOW DEPTH	0	MM			0	MM
24 HR TOTAL	T	10/27 TO 10/27				

DEGREE_DAYS

HEATING TOTAL	511		493	18	306	
SINCE 7/1	625		724	-99	453	
COOLING TOTAL	1		5	-4	48	
SINCE 1/1	542		558	-16	773	

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WIND (MPH)

AVERAGE WIND SPEED		7.3				
HIGHEST WIND SPEED/DIRECTION		32/310	DATE	10/14		
HIGHEST GUST SPEED/DIRECTION		44/250	DATE	10/26		

SKY COVER

POSSIBLE SUNSHINE (PERCENT)	MM
NUMBER OF DAYS FAIR	10
NUMBER OF DAYS PC	12
NUMBER OF DAYS CLOUDY	9

AVERAGE RH (PERCENT) 69

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	0	MIXED PRECIP	0
HEAVY RAIN	2	RAIN	7
LIGHT RAIN	15	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	1
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	18	FOG W/VIS <= 1/4 MILE	0
HAZE	1		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

Remarks: Trace of snow on the 26th was actually hail.

THE MUSKEGON MI CLIMATE SUMMARY FOR THE MONTH OF OCTOBER 2008

CLIMATE NORMAL PERIOD 1971 TO 2000
 CLIMATE RECORD PERIOD 1895 TO 2008

WEATHER	OBSERVED VALUE	DATE (S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE	DATE (S)
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 TEMPERATURE (F)
 RECORD

HIGH	86	10/15/1899				
LOW	19	10/29/1905				
HIGHEST	80	10/12	MM	MM	83	10/05
LOWEST	28	10/30 10/29 10/22	MM	MM	29	10/28
AVG. MAXIMUM	58.7		58.7	0.0	65.3	
AVG. MINIMUM	40.0		40.6	-0.6	48.7	
MEAN	49.3		49.7	-0.4	57.0	
DAYS MAX >= 90	0		MM	MM	0	
DAYS MAX <= 32	0		MM	MM	0	
DAYS MIN <= 32	4		MM	MM	1	
DAYS MIN <= 0	0		MM	MM	0	

PRECIPITATION (INCHES)

TOTALS	3.40		2.80	0.60	2.42	
DAILY AVG.	0.11		0.09	0.02	0.08	
DAYS >= .01	13		MM	MM	14	
DAYS >= .10	9		MM	MM	9	
DAYS >= .50	3		MM	MM	1	
DAYS >= 1.00	0		MM	MM	0	

GREATEST

24 HR. TOTAL 1.16 10/07 TO 10/08

SNOWFALL (INCHES)

TOTALS	T		0.6	-0.6	0.0	
SINCE 7/1	T					
SNOWDEPTH AVG.	0		MM	MM	0	
DAYS >= 1.0	0		0.1	-0.1	0	
GREATEST						
SNOW DEPTH	0	MM			0	MM
24 HR TOTAL	T	10/27 TO 10/27				

DEGREE_DAYS

HEATING TOTAL	481		476	5	281	
SINCE 7/1	576		686	-110	417	
COOLING TOTAL	2		3	-1	42	
SINCE 1/1	406		487	-81	673	

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 WIND (MPH)

AVERAGE WIND SPEED		8.4				
HIGHEST WIND SPEED/DIRECTION		29/210		DATE	10/25	
HIGHEST GUST SPEED/DIRECTION		43/290		DATE	10/14	

SKY COVER
POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR 18
NUMBER OF DAYS PC 7
NUMBER OF DAYS CLOUDY 6

AVERAGE RH (PERCENT) 70

WEATHER CONDITIONS. NUMBER OF DAYS WITH			
THUNDERSTORM	2	MIXED PRECIP	0
HEAVY RAIN	4	RAIN	9
LIGHT RAIN	16	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	1
HEAVY SNOW	0	SNOW	1
LIGHT SNOW	0	SLEET	0
FOG	16	FOG W/VIS <= 1/4 MILE	0
HAZE	5		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

Remarks: Trace of snow on the 26th was actually hail.